



# Section C:2

## *River Corridor*

### **PROJECT MANAGERS**

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## SUMMARY

The River Corridor Project (RCP) consists of the following projects: 300 Area Liquid Effluent Facility (LEF) WBS 1.2.3.2, Project Baseline Summary (PBS) WM05; 300 Area/Special Nuclear Materials, WBS 1.4.4, PBS TP04; Transition Project Management, WBS 1.4.6, PBS TP12; Accelerated Deactivation, WBS 1.4.8, PBS TP10; 324/327 Facility Transition, WBS 1.4.10, PBS TP08; and Hanford Surplus Facility Program (300 Area Revitalization), WBS 1.4.11, PBS TP14.

NOTE: B Plant WBS 1.4.1, PBS TP01 work scope was completed in FY 2000 and contains no data. Therefore, the PBS has been eliminated from this and all future reports.

PBS WM05 is divided between WBS 1.2.3.1, Liquid Effluents (200 LEF) and WBS 1.2.3.2, 310 TEDF/340 Facility (300 LEF). The 310 TEDF/340 Facility work scope is now included in the River Corridor Project, whereas the Liquid Effluents (200 LEF) work scope has remained in Waste Management Project. For the purpose of performance analysis, PBS WM05 is reported in its entirety in the Waste Management Project, which has the majority of the work scope and funding incorporated in its baseline.

NOTE: Unless otherwise noted, the Safety, Conduct of Operations, Milestone Achievement, and Cost/Schedule data contained herein is as of May 31, 2001. All other information is as of June 21, 2001.

Fiscal-year-to-date milestone performance (EA, DOE-HQ, and RL) shows that two milestones (67 percent) were completed on or ahead of schedule and one milestone is overdue.

## NOTABLE ACCOMPLISHMENTS

**The 324 Building Deactivation Project** — Seventeen out of a total of twenty-one planned 3-82B Grout Containers have been loaded out and shipped. In addition, the spent nuclear fuel transfer design/fabrication contract was awarded to support a July 2002 initiative of the Spent Nuclear Fuel transfer to the 200 Area.

**The 327 Building Deactivation Project** — Through effective deployment of minimum safety (min-safe) staff, seven cans of legacy waste were transferred from Dry Storage to A Cell; planning for cleanup and repackaging of legacy waste in I Cell was completed; and the Burst Test Pit water was sampled during this report period.

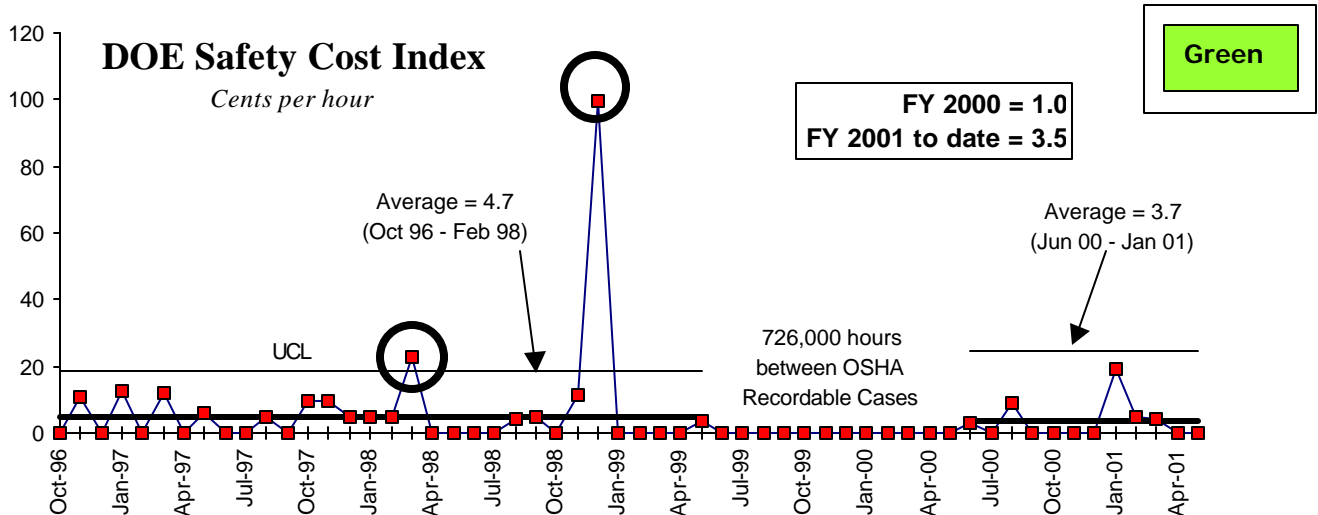
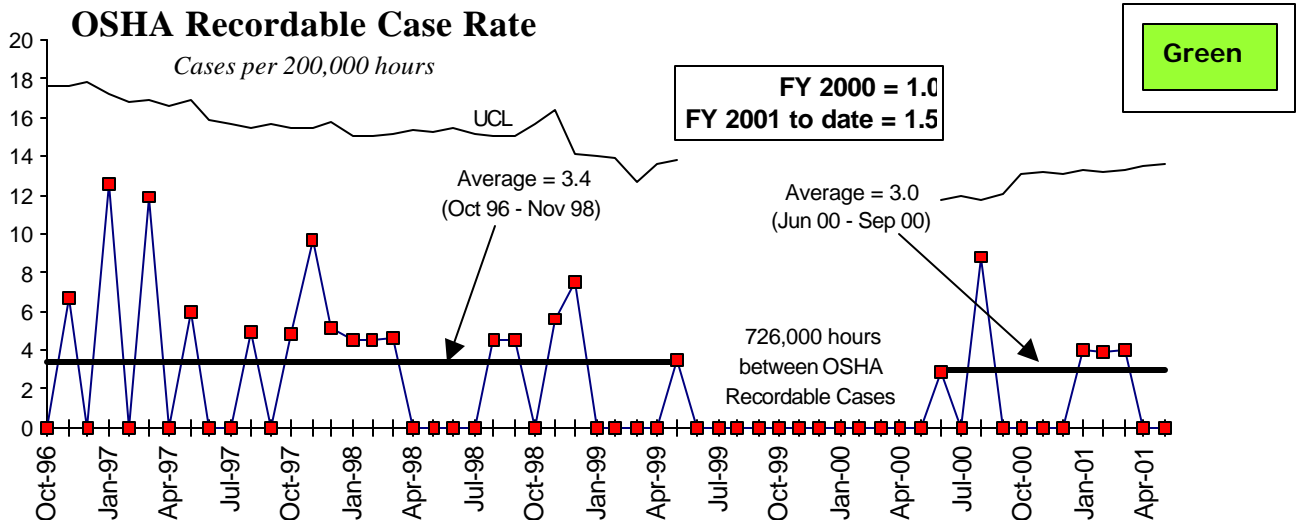
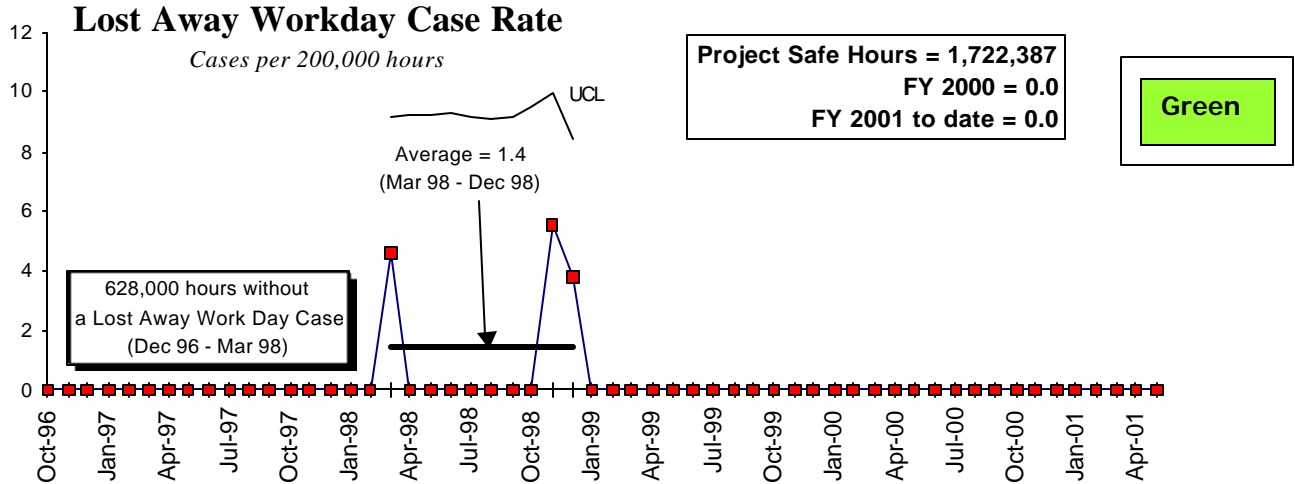
**The 300 Area Treated Effluent Disposal Facility (TEDF)** — During the month of May, the TEDF Facility treated 5.0 million gallons of wastewater; over seven tons of new resin was installed in the IX columns in just one day; and, the first three of the ongoing wastewater shipments from the 100N water plant lab was received and processed.

**Accelerated Deactivation Project** — The sixth of nine shipments of contaminated fuel to the Low-Level Burial Ground (LLBG) was completed and the first of two water towers scheduled for demolition is now on the ground. Additionally, the Engineering Evaluation/Cost Analysis (EE/CA) #1 (for the northwest corner of the 300 Area) was formally transmitted to RL for review. The Notice of Construction (NOC) for entering 224-T has been approved by the Washington Department of Health (WDOH) and is awaiting EPA approval.

**Equipment Disposition Project** — Planning activities are on track to support the transportation and shipping of the tall cask car (from Hanford to Memphis, TN.) for mid-July 2001 shipping.

## SAFETY

The River Corridor Project (RCP) has achieved more than 1.7 million safe work hours since its last lost away workday case. The OSHA Recordable Case Rate is 1.5, which is above the company goal of 0.9. The overall rating for RCP is green.

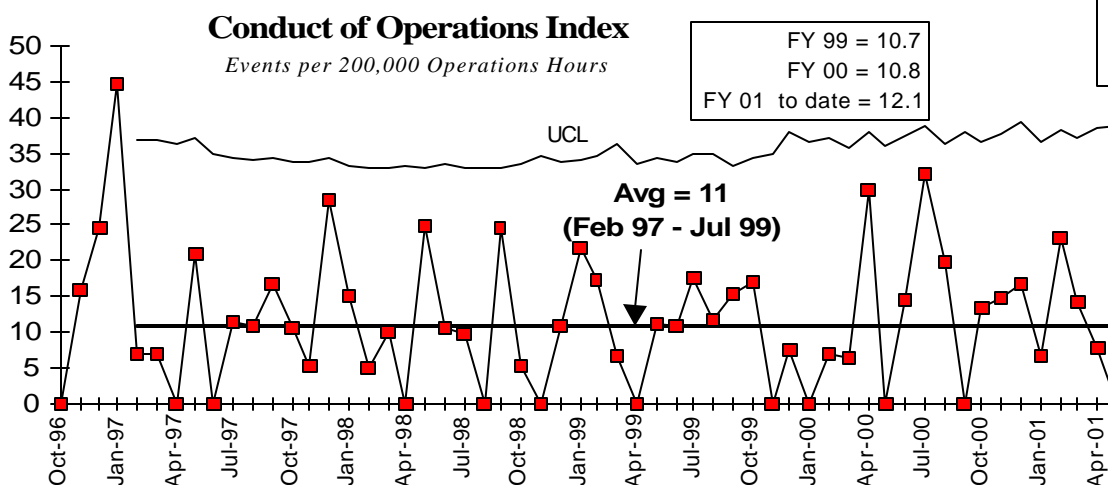


## ISMS STATUS

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- The RCP ISMS "Sustain and Maintain" process is in place. RCP is supporting development of the FH Annual ISMS Performance Review to RL.
- The Voluntary Protection Plan application was submitted to the Fluor Hanford (FH) president on June 20, 2001. A DOE-HQ on-site field review will be scheduled later in the year.

## CONDUCT OF OPERATIONS



Green

## BREAKTHROUGHS / OPPORTUNITIES FOR IMPROVEMENT

### Breakthroughs

- **Technical Review of 327 Hot Cell Removal** — Technology Management, supported by RCP, completed a review of the feasibility of intact removal of the hot cells from the 327 Facility. The review team found the concept of intact removal to be feasible and had significant ALARA cost and schedule benefits. RCP concurs with the conclusions and recommendations for near term actions as first steps toward re-planning the deactivation baseline. Strategies and alternatives that will allow RCP to complete the most critical of the recommended near term actions are being identified.
- **Value Engineering for Configuration Management** — The RCP procedures "Configuration Baseline Management" and "Engineering Document Change Control," were approved June 1, 2001. The two procedures authorize the use of alternate configuration management methods. Use of the alternate methods has the potential to dramatically change the way in which facility modifications are documented within the RCP.
- **Permit By Rule Treatment at 300 Area TEDF** — FH is investigating the potential to treat limited categories of liquid non-radioactive hazardous wastes using the existing capabilities of the 300 Area TEDF by applying a permit exclusion available within the waste regulations. Depending upon the outcome of ongoing regulatory analysis, treatment of hazardous wastes at TEDF could provide a low-cost option for disposal of some wastes currently sent off-site. Preliminary regulatory evaluation results are promising, and appear to possibly allow treatment of more categories of waste than originally anticipated. A decision on whether to proceed based on the outcome of the regulatory analysis and customer surveys is anticipated in September 2001.

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## Opportunities for Improvement

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- New EM-50 Funds (\$450K) for Robust Manipulator Arm**— Via support from EM50, RCP's 324 Building will acquire an AEA ARTISAN manipulator arm to support hot cell deactivation. ALARA/extremity-dose savings are expected due to an anticipated reduction in maintenance and repair. AEA's Project Manager for the ARTISAN arm plans to meet with 324 Building staff during the week of June 25, 2001. The focus of the visit will be to ensure that the robotic system and facility interface requirements are well defined and mutually understood. Following site testing and operations training, the ARTISAN will be deployed in the Shielded Materials Facility hot cells located in the 324 Building. Delivery of the ARTISAN arm to Hanford is expected by the end of FY 2001. This is the last report on this item.

## UPCOMING ACTIVITIES

**224-T** - Begin 224-T initial entry and characterization on receipt of the NOC targeted for late-June. The slip from the original March 2001 date is a result of the Criticality Safety Evaluation Report and the NOC both requiring more time than expected.

**Uranium Disposition** — Approximately 135 metric tons of surface-contaminated uranium fuel is to be shipped to the LLBG by June 30, 2001 and approximately 5 metric tons of miscellaneous uranium scrap materials will be transferred by September 30, 2001. In addition, the final disposition of thorium materials located within the 303-K Facility will be completed by September 30, 2001.

**Tri-Party Agreement Milestone M-89-02** — The remaining B Cell low-level waste and transuranic debris, completing the M-89-02 work scope, will be moved away from the 300 Area by July 31, 2001.

**327 Authorization Basis** — Implement technical update of 327 Authorization Basis by end of FY 2001. This was slipped from May 2001 due to resource limitations created by the new requirements of the 10CFR830 Nuclear Safety Rule.

**300 Area Skyline Initiative** - Demolish 3902A, 3902B, and 303-K by September 30, 2001.


## Milestone Achievement

Green

MILESTONE TYPE	FISCAL YEAR-TO-DATE				REMAINING SCHEDULED			TOTAL FY 2001
	Completed Early	Completed On Schedule	Completed Late	Overdue	Forecast Early	Forecast On Schedule	Forecast Late	
Enforceable Agreement	0	0	0	1	0	0	0	1
DOE-HQ	0	0	0	0	0	0	0	0
RL	0	2	0	0	1	1	0	4
Total Project	0	2	0	1	1	1	0	5

Only TPA/EA milestones and all FY 2001 overdue and forecast late milestones are addressed in this report. Milestones overdue are deleted from the Milestone Exception Report once they are completed. The following chart summarizes the FY 2001 TPA/EA milestone achievement and a Milestone Exception Report follows. The last milestone table summarizes the first six months of FY 2002 TPA/EA milestones.

**FY 2001 Tri-Party Agreement / EA Milestones**

Number	Milestone Title	Status
<b>M-89-02</b>	<b>"Complete Removal of 324 Building Radiochemical Engineering Cells (REC) B Cell Mixed Waste (MW) and Equipment,"</b>	<b>Due 11/30/00</b> — Progress continues to be made in accomplishing the milestone work scope; however, due to technical and operational issues the milestone was not met. A revised schedule was developed with the support of RL and Ecology. The scheduled date for the removal and shipment of mixed waste from B Cell, March 30, 2001, was met. Progress towards completing shipment of low-level waste remains on schedule by July 31, 2001, as agreed to with the regulators. 
<b>DNFSB Commitments</b>		
	Nothing to report at this time.	

## MILESTONE EXCEPTION REPORT

<u>Number/WBS</u>	<u>Level</u>	<u>Milestone Title</u>	<u>Baseline Date</u>	<u>Forecast Date</u>
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### Overdue – 1

<b>TRP-99-901</b>	<b>EA</b>	Complete Removal of 324 Radio-chemical Engineering Cells (REC)	11/30/00	07/31/01
<b>1.4.10</b>		B Cell Mixed Waste (MW) & Equip.		

**Cause:** Technical and operational issues delayed completion of this work scope.

**Impact:** Completion date of TPA milestone M-89-02 was not met.

**Corrective Action:** A revised schedule was developed with the support of RL and Ecology.

**FY 2002 Tri-Party Agreement / EA Milestones**

Number	Milestone Title	Status
<b>MX-92-06-T01</b>	<b>"Complete Disposition for all Site Unirradiated Uranium"</b>	<b>Due 12/31/01</b> — On schedule.
<b>DNFSB Commitments</b>		
	Nothing to report at this time.	

## PERFORMANCE OBJECTIVES

Outcomes	Performance Indicator	Status
Restore the River Corridor for Multiple Uses	<b>FHI-M8 – 300 Area Cleanup</b>	
	Measure 1: Accelerate 300 Area Cleanup	
	Expectation 1: Deactivate 324/327 Buildings	
	Base: Complete 26.5% remaining 324/327-baseline work by June 30, 2002.	8.7 percent of the remaining life-cycle work scope completed October 2000 through May 2001.
	Base: Complete B Cell cleanout and shipment of B Cell waste to 200 Area Burial Grounds.	Shipment of all steel waste disposal boxes from B Cell has been completed and seventeen of the planned twenty-one 3-82B containers have been loaded out and shipped.
	Stretch: Complete additional 2.5% remaining 324/327-baseline work.	No additional work scope has been performed to date.
	Expectation 2: Disposition surplus facilities	
	Base: Disposition 3902A, 3802B & 303-K by September 30, 2001.	Tower demolition work is on schedule with the first tower now down. The 303-K demolition schedule has been revised to incorporate the Baseline Change Request (BCR) for Resource Conservation and Recovery Act (RCRA) waste disposition (FSP-01-050), rather than Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) disposition. The NOC was approved by WDOH, and is at the EPA. Responses have been received from Fluor Federal Services (FFS), and discussions continue with Bechtel Hanford, Inc. (BHI) on its ability to meet required cost and schedule.
	Stretch: Disposition 377 Bldg. by June 30, 2002.	The EE/CA #1, which includes the 377 building demolition scope, was completed June 13, 2001, and submitted to RL. However, a decision has been made by RL not to proceed with the EE/CA process at this time. The work scope will need to be performed under RCRA vs. CERCLA disposition regulations.
	Expectation 3: Disposition uranium billets, uranium dioxide, scrap materials in 200/300 Areas, and 303-K thorium-232 by September 30, 2001.	Completed shipment of uranium billets and UO <sub>2</sub> to the DOE Portsmouth Site in Ohio. The Project has completed six of nine shipments of contaminated fuel (135 MT) to the LLBG, and is on schedule to complete all specified activities by the end of FY 2001.
	Measure 2: Support RCP Contract Transition	
	Expectation 1:	
	Stretch: Support RCP contract transition by July 1, 2002.	A draft transition plan has been prepared.

Transition Central Plateau to support long-term waste management

### FHI-M3 – 200 Area Facility Disposition

#### Measure 1: Disposition Surplus Buildings and Rolling Stock

##### Expectation 1:

Base: Decontaminate & Decommission (D&D) 233-S & 233-SA Facilities by September 30, 2004.

Work will be initiated July 1, 2002.

Stretch: D&D 233-S & 233-SA by June 30, 2004.

Work will be initiated July 1, 2002.

Expectation 2: Complete installation of new roofs on PUREX & B Plant by September 30, 2002.

Work will be initiated February 1, 2002.

##### Expectation 3:

Base: Disposition contaminated railcars by June 30, 2006.

Efforts continue to disposition one rail car in FY 2001 with the shipment of the tall cask car planned for mid-July. The project management plan has been issued.

Stretch: Disposition contaminated railcars by August 31, 2005.

Nothing to report.

Super stretch: Disposition contaminated railcars and heavy equipment by September 30, 2003.

Nothing to report.

## FY 2001 SCHEDULE / COST PERFORMANCE – ALL FUND TYPES CUMULATIVE TO DATE STATUS – (\$000)

Green

		FYTD									
	By PBS	BCWS	BCWP	ACWP	SV	%	CV	%	PEM	EAC	
PBS TP04 WBS 1.4.4	300 Area/ Special Nuclear Materials	\$ 2,778	\$ 2,560	\$ 2,580	\$ (218)	-8%	\$ (20)	-1%	\$ 4,169	\$ 4,568	
PBS TP12 WBS 1.4.6	Transition Program Management	\$ 4,573	\$ 4,578	\$ 3,970	\$ 4	0%	\$ 608	13%	\$ 6,940	\$ 6,272	
PBS TP10 WBS 1.4.8	Accelerated Deactivation	\$ 2,710	\$ 2,472	\$ 2,665	\$ (238)	-9%	\$ (193)	-8%	\$ 3,651	\$ 4,324	
PBS TP08 WBS 1.4.10	324/327 Facility Transition	\$ 23,936	\$ 20,730	\$ 19,429	\$ (3,206)	-13%	\$ 1,301	6%	\$ 35,766	\$ 34,304	
PBS TP14 WBS 1.4.11	Hanford Surplus Facility Program (300Area Revitalization)	\$ 375	\$ 375	\$ 327	\$ 0	0%	\$ 48	13%	\$ 1,322	\$ 1,088	
Total		\$ 34,373	\$ 30,715	\$ 28,971	\$ (3,658)	-11%	\$ 1,744	6%	\$ 51,847	\$ 50,556	

Notes: RL-Directed costs (steam and laundry) are included in the PEM BCWS. 310 TEF/340 Facility performance data is reported under PBS WM05 (Waste Management).

Authorized baseline is per the Integrated Planning Accountability, and Budget System (IPABS) – Project Execution Module (PEM).



## FY TO DATE SCHEDULE / COST PERFORMANCE

The unfavorable schedule variance was due to change in strategies for preparation in support of SNF removal, 324 B-Cell waste shipment delays and crane repairs. The favorable cost variance is primarily due to lower than planned FY 2001 fee accruals and favorable variance distributions (FY 2000 unearned fee reversals).

For all active sub-PBSs and TTPs associated with the Operations/Field Office, Fiscal Year to Date (FYTD) Cost and Schedule variances exceeding + / - 10 percent or one million dollars require submission of narratives to explain the variance.

### Schedule Variance Analysis: (-\$3.7M)

#### 324/327 Facility Transition — 1.4.10/TP08

**Description and Cause:** The unfavorable schedule variance (\$3,206K) is due to several factors, the primary contributor being Spent Fuel Removal preparation (\$1,506K). The baseline does not reflect current single contractor methodology developed in the vendor forum, making it difficult to report progress against the current baseline for acquiring a transfer system. Other contributors include the completion of shipping B Cell waste to the central plateau (-\$328K) and the D Cell work (-\$378K) that requires an approved Notice of Construction (NOC) prior to start.

**Impact:** Tri-Party Agreement milestone M-89-02 ("Complete Removal of 324 Building Radiochemical Engineering Cells B Cell Mixed Waste and Equipment") was missed but is on target to be complete by the regulator agreed to revised date of July 31, 2001. Spent Fuel Removal preparation continues to support initiation of spent fuel removal from B Cell in July 2002.

**Corrective Action:** Spent Fuel removal project work scope is being updated to reflect a single contract methodology, which is targeted for implementation by July 31, 2001. Although delayed from the original TPA milestone date, waste shipments to the central plateau are on schedule to be complete by July 31, 2001, and completion of D Cell work scope is expected by September 29, 2001.

All other schedule variances are within threshold.

### Cost Variance Analysis: (+\$1.7M)

#### Accelerated Deactivation — 1.4.8/TP10

**Description and Cause:** The unfavorable cost variance (\$193K) is primarily a result of unplanned personnel supporting project management activities while waiting for funding of special projects, i.e. Pacific Northwest National Laboratory (PNNL) building transfers.

**Impact:** No impact.

**Corrective Action:** Special project work scope (PNNL building transfers, Skyline Initiative, etc.) has commenced and labor resources will be shifted to provide support, improving the unfavorable cost variance in the near future.

#### Transition Project Management — 1.4.6/TP12

**Description and Cause:** The favorable cost variance (+\$608K) is primarily due to time phasing of planned contracts, lower than planned fee assessment accruals and a favorable variance distribution (FY 2000 unearned fee reversal) received in May.

**Impact:** No Impact.

**Corrective Action:** The variance will be reduced as contract costs increase later in the year. Also, a BCR is pending that will reduce the fee assessment, thereby reducing the variance.

#### Hanford Surplus Facility Program — 1.4.10/TP08

**Description and Cause:** The favorable cost variance (\$1,301K) was primarily due to lower than planned FY 2001 fee assessment accruals and a favorable variance distribution (FY 2000 unearned fee reversal) received in May.

**Impact:** No Impact.

**Corrective Action:** The variance will improve, pending approval of a BCR that will reduce the FY 2001 fee assessment.

#### Hanford Surplus Facility Program — 1.4.11/TP14

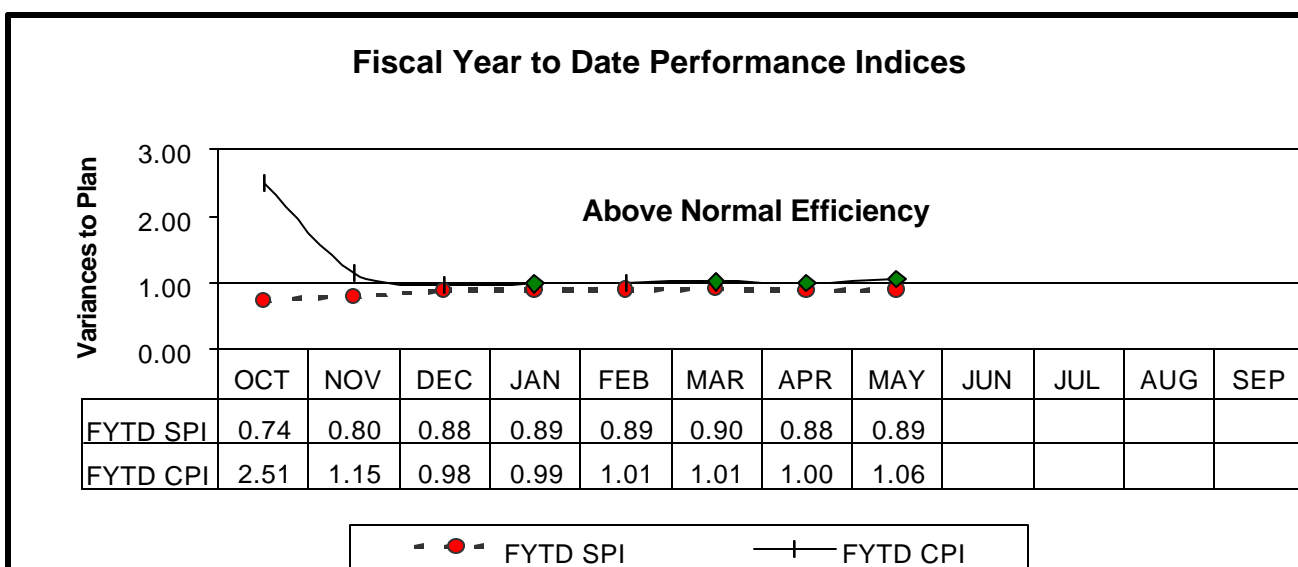
**Description and Cause:** The favorable cost variance (\$48K) was due to labor resources diverted to other high priority work, and a favorable variance distribution (FY 2000 unearned fee reversal).

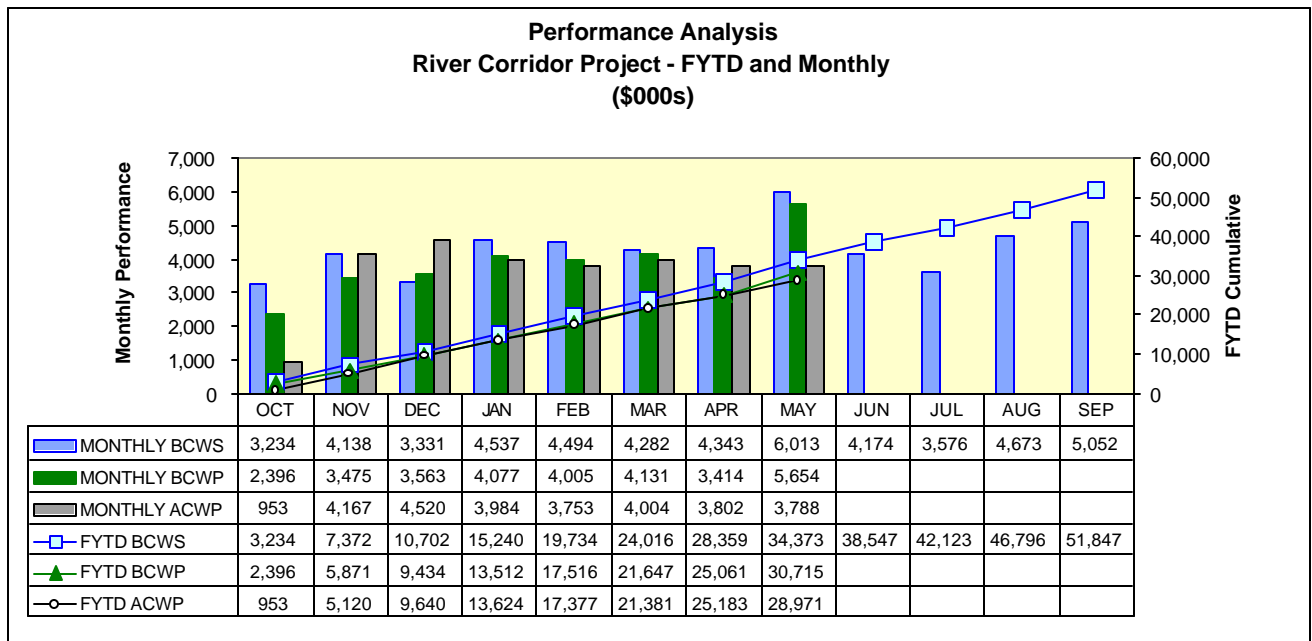
**Impact:** No Impact.

**Corrective Action:** No corrective action required.

All other cost variances are within established thresholds.

### SCHEDULE / COST PERFORMANCE (MONTHLY AND FYTD)





## FUNDS MANAGEMENT

### FUNDS VS SPENDING FORECAST (\$000)

### FY 2001 TO DATE

Green

	Project Completion *			Post 2006 *			Line Items *		
	Funds	FYSF	Variance	Funds	FYSF	Variance	Funds	FYSF	Variance
The River 1.4 River Corridor TP01,TP04,TP08,TP10,TP12,TP14,WM05	49,066	47,401	1,665	5,637	5,351	286			
Line Item									
Total River Corridor Operating	\$49,066	\$47,401	\$ 1,665	\$5,637	\$5,351	\$ 286			
Total River Corridor Line Item									

[Status as of 6/25/01]

\* Control Point

## ISSUES

### Technical Issues

**Issue:** BHI verbally informed RCP that it may not be able to support the demolition schedule for the 303-K facility.

**Impact:** The delay will result in RCP missing the RCRA Part B permit condition of clean closure certificated submittal due September 30, 2001.

**Corrective Action:** BHI is evaluating its ability to do the demolition in early September, which will meet the PI, but will require an extension to the RCRA Part B permit closure. Discussions have occurred with Fluor Federal Services (FFS) on its ability to do the demolition and a draft proposal was received from FFS on June 13, 2001. BHI is expected to provide its response by mid-July.

## REGULATORY ISSUES

**Issue:** The delay in approval of the NOC for the D-Cell Pipe Trench has delayed D-Cell equipment size reduction (planned to begin in April 2001) to July 2001.

**Impact:** D-Cell work will continue to be delayed until the NOC is issued. D-Cell delays will impact work in the pipe trench (August 2001), which may jeopardize spent nuclear fuel shipments (July 2002).

**Corrective Action:** Current estimate is for the NOC to be issued by mid-June 2001, with commencement of work in July 2001.

**Issue:** In preparing for transfer of a curium source from the 327 Facility fuel basin, it was determined that the source potentially violated an Operational Safety Requirement (OSR) and an Unusual Occurrence (UO) was declared.

**Impact:** This discovery delays the issuance of the developed Basis for Interim Operation (BIO), scheduled for transmittal to the DOE in June 2001.

**Corrective Action:** Specified recovery actions per the OSR were implemented to include suspending operations within the fuel basin. Subsequent information confirmed the OSR was not violated, however. Planning will continue for transfer of the source from the basin.

## EXTERNAL AND DOE ISSUES

None to report.

## DOE Requests

**Issue:** An opportunity exists for transfer of PNNL facilities into Project Baseline Summary (PBS) TP-14, pending resolution of the current DOE-HQ guidance to EM (pipeline suspension). PNNL has funds for FY 2001/2002 Surveillance and Maintenance identified for transfer to FH, but these funds may no longer be available when the suspension ends.

**Impact:** Efficiencies realized through combining these facilities into TP-14 may be jeopardized.

**Corrective Action:** A Memorandum of Agreement (MOA) to begin the transfer process was approved by PNNL and FH, and transmitted to RL on March 23, 2001. Direction to proceed was received in writing from the RL Contracting Officer on May 22, 2001. Commencement of the pre-transfer activities for facilities began on June 12, 2001. (*No further status to be provided.*)

## BASLINE CHANGE REQUESTS CURRENTLY IN PROCESS

PROJECT CHANGE NUMBER	DATE ORIGIN.	BCR TITLE	FY01 COST IMPACT (\$1,000)	SCH	TECH	DATE To FH CCB	FH CCB APR'VD	RL APR'VD	CURRENT STATUS
FSP-2000-002	11/2/99	Mark-42 Project Completion	\$304		X	04/05/00			Additional funding requested
FSP-2001-001	10/9/00	Baseline Adjustment to TP08	(\$496)		X				Draft Prepared
FSP-2001-050	4/21/01	Revised Path Forward for 303-K Bldg. Demolition	\$100	X	X				FH Approved 6/1/01
FSP-2001-056	5/24/01	Transfer of PNNL facilities to Fluor Hanford	\$526	X	X				On hold until further notice
FSP-2001-057	5/3/01	Engineering Study to determine the most cost effective and safe path for the	\$70		X				6/15/01 Approved by RCP Board
FSP-2001-058	6/1/01	Revised Milestones for RL-TP04	\$0		X				6/15/01 Approved by RCP Board
FSP-2001-059	6/7/01	FSP-2001-059, 324 Facility Workslope: Delete Manipulators Decontamination	\$0	X					6/18/01 Review by RCP Board
ADVANCE WORK AUTHORIZATIONS									
		None							

## KEY INTEGRATION ACTIVITIES

- Robotics Technology Presentation at Pasco's McLoughlin Middle School** - Based on a request made at RCP's display booth at the recent Safety Expo, a presentation on Hanford robotics was developed and delivered to four Technology Laboratory classes at Pasco's McLoughlin Middle School on June 1, 2001. The presentation team was comprised of representatives from RCP's 324 Facility and Chief Engineer organizations, and from PNNL's Robotics Group.
- Potential Technology Funding for 327 Building Deactivation** - The current FY 2002 planning budget for EM50's Transuranic (TRU) and Mixed Waste Focus Area (TMFA) as managed from Idaho National Engineering and Environmental Laboratory, now targets \$790K for technology tasks focused on waste equipment size reduction at Hanford. In top consideration for a portion of this funding are opportunities at the 327 Building (e.g., detachment of H Cell using diamond wire cutting; removal and size reduction of an IX-column presently stored in the 327 wet basin; and removal and size reduction of heating, ventilation, and air conditioning ducting). If funded, this project would be a collaborative effort for FH, the TMFA, and PNNL/EM50's Robotics Crosscutting Group.
- West Valley Hot Cells Proposal Resubmitted to EM50** - Based on a request from EM50, the Large Scale Demonstration and Deployment Project proposal for West Valley hot cell deactivation was rewritten and resubmitted for funding consideration. This proposal was initially submitted to EM50 in September 2000, but was not selected for the first round of awards. If funded in the next round of awards RCP will participate on the Integrated Contractor Team (ICT) for influencing hot cell technologies to be demonstrated at West Valley, and potentially transferred to RCP's 324 and 327 Facilities.